

Application No.: 10/075,840

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Docket No.: 495812001400

AMENDMENTS TO THE CLAIMS

ENTRY
UNDER
1.1/16
NOT APPROVED
8/9/99-2004

Claim 1 (Currently Amended): A method for monitoring diffraction while recording a hologram, comprising:

generating a source beam;

generating a data beam by projecting a first component of the source beam through a data source, the data beam having a first polarization;

generating a reference beam by adjusting a polarization of a second component of the source beam to provide a second polarization;

recording a hologram in a holographic medium from an interference between the data beam and the reference beam; and

measuring an offset component in an output arm of the data beam used for recording the hologram.

Claim 2 (Original): A method as claimed in claim 1, further comprising:

determining an output power from the offset component;

determining an input power corresponding to an input arm of the reference beam; and

determining a diffraction efficiency from the output power and the input power.

Claim 3 (Original): A method as claimed in claim 2, further comprising: monitoring the diffraction efficiency to determine a termination condition for recording the hologram.

Claim 4 (Original): A method as claimed in claim 1, further comprising:

determining an output power from the offset component; and

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